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Memorandum 6M-3538

page 1 of 4

Division 6 - Lincoln Laboratory
Massachusetts Institute of Technology
Lexington 73, Massachusetts

SUBJECT: SAGE SYSTEM MEETING 18 APRIL 1955

To: See Distribution List

From: E. D. Lundberg

Date: 18 April 1955

Approved:


A. P. Kromer

- Agenda:
1. Taylor's trip to Willow Run Research Center.
 2. ADES Monthly Status Meeting.
 3. Communications between the First Direction Center and P-sites.
 4. Lighting in Building "F".
 5. Operational Plan
 6. ADES Training Document.
 7. Integration of AN/FSG Equipment with AN/FSQ-7.
 8. Sector Command Post.
 9. Security Problems.
 10. Coordination Committee Meeting

1. Taylor's Trip to Willow Run Research Center

Taylor visited the Willow Run Research Center last week for the purpose of delivering a lecture on computer reliability considerations. Willow Run is embarking on a project for the Army and problems of common interest were discussed. They have a display problem similar to ours and indicated a desire to receive one of our charactron tubes. It was agreed that this could be furnished, if a written request is received from the Center.

2. ADES Monthly Status Meeting

ADES status meeting was held in New York on 12 April. Following are some of the items of interest discussed:

- a) The Air Force announced a decision to rent DDR-DDT equipment from the Bell System, except equipment located at gap-filler sites and Texas Towers. Bell Laboratories is going ahead with the design of the equipment on this basis.

- b) The maintenance intercom system for direction centers, as proposed by Lincoln and IBM, has been approved by the Air Force. This will be a leased, dial system.
- c) AT & T Company indicated that they have received necessary authorization to start engineering on external telephone circuits and related equipment for SAGE subsectors 1 and 2.
- d) ADC established a requirement that overlap radars be tied into the direction center by the operational date of the subsector concerned. This needs investigation as other schedules, e.g., FST-2 installation, are not set up on this basis.
- e) Lincoln agreed to expand the material on the experimental subsector for the next monthly meeting.
- f) IBM indicated that they did not agree that all proposed class "A" changes had to be incorporated into the first machine. ADC and ADES will investigate this matter.
- g) Following the regular meeting, the decision was made to authorize the six additional auxiliary memory drums for the AN/FSQ-8. AFCRC Exhibit 18, which is being processed by CRC, will include this requirement in the initial issue of the document.

3. Communications Between The First Direction Center and F-Sites

The Systems Operation and Testing Section of the Engineering-Installation Phasing Committee Summary Report #6 is being revised. As system testing of the first subsector is scheduled for 1 November 1956, it was proposed that all long range radars be tied-in (calibrated and running) by 1 November. However, it was decided that since everyone is working on tight schedules, it would probably be impossible to advance currently scheduled dates. Our best course of action would be to see that all schedules are strictly adhered to and that all parties fully understand the scope of work involved in commitments that have been made. Further study should be made on the basis of experience in the experimental subsector to insure that present schedules are satisfactory.

4. Lighting in Building "F"

O'Brien reported on the development of the lighting system in building "F". Experimentation has revealed that blue lights are the most desirable for use in the operational areas of Building "F". The specific method of obtaining the blue light has not been determined. One method which holds great promise is the fabrication of a special blue Lucite into tubing to fit over standard fluorescent bulbs. Experiments are also being made with different types of eggcrates. A relatively inexpensive type, which may solve the problem, is made of glued aluminum foil with 3/8" cells. Group 38 and Division 6 will work together with Francis Associates in continued experimentation in this area.

5. Operation Plan

The Operational Plan has been published and is being distributed. The Lincoln supply of 100 copies is considered inadequate, as a considerable number of copies will be required for training purposes. Drafts of the Operational Plan in the possession of Lincoln personnel should no longer be used, as certain changes have been made in the final printed document.

6. ADES Training Document

ADES has prepared a training document which has been forwarded to Lincoln for comment. The use of the XD-1 computer is proposed on a four hour per day — five day per week basis from September 1956 to August 1957 and eight hours per day thereafter. The request for this time must be made by ADES to AFCRC. Lincoln's feeling is that the perpetuation of training on XD-1 is undesirable, and that some other plan should be proposed, e.g., the early construction of a low priority direction center to be used primarily for training purposes. In regard to time allocation on XD-1, it was emphasized that the Lincoln requirement for time should be established as soon as possible. Lincoln time (which includes IBM requirements) will include time required for equipment evaluation and check-out; preparation of the master programs; adaptation of programs for subsectors 1, 2, and 3; program research in the future; and the entire test program. Jacobs will assign someone to gather the necessary information to prepare our request for time.

7. Integration of AN/FSG Equipment with AN/FSQ-7

Brenner of the Army Signal Corps will visit Lincoln on 20 April to discuss integration of AN/FSG equipment with AN/FSQ-7. IBM has been requested to furnish a man to sit in on this meeting.

8. Sector Command Post

Changes have been proposed in the sector command post layout to correct deficiencies in the present design. The problem has been presented to WE(ADES) for study, together with a Lincoln proposal for changes contained in Sketch #SD-75203. ADC has agreed informally that these changes are required.

9. Security Problems

A large number of IBM personnel, with only confidential clearance, are now working in Building "F". Several problems have arisen because of restrictions contained in current internal security regulations. This situation may become more serious as IBM and other organizations send increasing numbers of personnel to Lincoln. Farr will investigate this problem to determine what action can and should be taken.

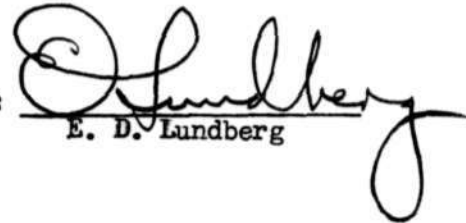
Memorandum 6M-3538

page 4

10. Coordination Committee Meeting

The Coordination Committee will meet at Lincoln on 20 April. Items to be discussed will include acceptance tests and change procedure for XD-1.

SIGNED:


E. D. Lundberg

EDL:mmc

Distributions:

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